Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

MATTER AND THE RESURRECTION

As Christians, we are committed by the nature of our Lord's resurrection to an extraordinary position with respect to matter. The Catholic Church testifies that our Lord's risen body was a real body. He said to His Apostles the evening after His resurrection, when they refused to believe their senses and thought they saw a spirit: "Handle Me and see, for a spirit hath not flesh and bones as ye see Me have," and He showed them His hands and His side so that He might convince them that He had the same body which hung upon the cross. Then, when they still believed not, for joy, He said to them, "Have ye here anything to eat?" and they gave him a piece of broiled fish and of an honey comb, and He took it and did eat before them. He walked with them, and talked and reasoned with them, and ate and drank with them, from time to time, for forty days after He rose from the dead, thus giving "many infallible proofs" of the reality of His risen body.

Further, the testimony continues, that, real as his body was, it had certain very extraordinary properties. It could pass through solid substances. When He rose, He did not stop to unwind the linen sheet with which Joseph and Nicodemus had wrapped His dead body when they laid it in the tomb, but passed through it, leaving it as it had been when around Him, except that, of course, now it was collapsed. He did not wait for the angel to roll the stone from the doorway of the tomb to let Him out, but passed through the rocky walls as if they had been air. And when He called on His Apostles that evening, He did not knock to be admitted through those doors which were "closed for fear of the Jews," but stood in the midst of them, as if He had materialized out of nothing into the middle of the room.

Again, he had the power to appear and disappear, as when He suddenly vanished out of the sight of the two disciples at Emmaus, while sitting at the supper-table breaking bread with them, after having walked and talked with them most of the afternoon.

He went from place to place, now being in Jerusalem, then beside the sea of Galilee and again on a mountain side, without having walked or ridden there.

He ascended from the earth to the sky at His ascension as if there were no such thing as gravity, and finally, though this property did not show itself until after the ascension, He shone with a light which eclipsed the brightness of the noonday sun, struck St. Paul and his companions from their horses to the ground, and caused St. John to fall at His feet as dead.

These post-resurrection actions of our Lord are never classed with His miracles, but are set forth in Scripture as the normal powers of His body.

And even if we should be inclined to classify them as miracles, we must remember that His miracles were according to the laws and possibilities of nature. This was a marked feature of them. Moreover, whatever change had come over His body since His death, no change had come over this world in which He still lingered. Nature had not died and risen again. We are required therefore to believe that these actions of our Lord, after He rose from the dead, are possible in the nature of things and are no Arabian Nights performances.

Yet it must be confessed that they look incredible and preposterous. I am surprised that our enemies have not assaulted us fiercely here. The reason why they have not done so is because we have kept quiet about the matter, not altogether realizing the full significance of it ourselves. If we had been attacked, we should have had only two places of refuge. One would have been that the account must be true, somehow or other, for how else could the Apostles, plain, practical men as they were, get the idea of such a body? And if they could have invented the story, how can it be thought that they would have the temerity to propose it to the faith of an incredulous world? To do so would only immensely increase their difficulties. The other refuge would have been that we do not, yet, know what matter is. Until we do, no one is competent to say what can or cannot be done with it. Such hitherto would have been our only lines of argument; but modern discoveries of science with respect to the nature of matter furnish us now with a defence which is as extraordinary and wonderful as the faith itself.

First science gives us reason for believing in the objective existence of matter. It has confirmed the testimony of our senses by showing that we cannot destroy the smallest quantity of it. We can change its form, temperature, and density. We can, by combining it with other matter, change its chemical properties, but there is one feature of it over which we have no control, that is its quantity. The conservation of matter is a law from which no one of us can escape. It cannot be that an object like this is merely an idea of the mind. Satisfied with its real existence, science goes on to learn what it is, and in this effort has made most marvelous discoveries.

For many years we have all been taught that matter consists of sixty-four elementary substances. It was natural, however, that men should think that these might be different forms of one common substance. This was thought probable because of the fact that they differed from each other not in quality, but in weight. The lightest was hydrogen. Oxygen weighed sixteen times as much, therefore it looked as if oxygen were not a simple element but was composed of sixteen parts of hydrogen. If this were true, then it ought to be possible to break oxygen up into so much hydrogen, but no one had done it. It was noticed that heat would break up chemical compounds, as when water poured upon a very hot fire is broken up into its component elements of hydrogen and oxygen and burned, thus adding to the conflagration instead of putting it out, but no temperature had been found high enough to break the oxygen into hydrogen. Nevertheless there might be such a temperature. It was noticed that the spectrum analysis of the light from a white star like Sirius shows the presence there of nothing but hydrogen. This was supposed to be because the fervent heat of Sirius, which is hotter even than our Sun, had broken every element there into hydrogen. Still, man had never been able to produce such heat and thus reduce an element by experiment. Hence the idea remained as a mere hypothesis until recently, when Professor Rutherford of McGill University, Montreal, while experimenting with Thorium found it to be throwing off atoms of substance. And when this cast-off substance was examined it was found to be not Thorium but another element.

The atomic weight of Thorium is over 200. The weight of this substance was only 1 or 2. It was therefore hydrogen or helium. At last an instance had been found of an element breaking up. Since then, others have been found to break up; as, for example, Radium, Uranium, and Polonium; and still others are suspected of it, as Potassium, Silicon, Sodium, and Chlorine. They do not break up into hydrogen at one step, but first into an element of a lower atomic weight than themselves; this in turn into one of still lower weight, until hydrogen is reached.

Having accepted, then, as an hypothesis, that hydrogen is the fundamental element, the next question was, what is hydrogen? The question was not about its chemical properties. They were well known, but what was it in itself? This question took the subject out of the domain of chemistry into the realm of physics. The physicist said that it consisted of the very smallest parts of matter in the world. He called these parts 'atoms' from *a* (not) and *temnein* (to cut), meaning something which cannot be cut in two. Though these atoms are so small that they cannot be seen by the strongest microscope, yet by indirect means they are measured and found to be not greater than 1–250,000,000, nor less than 1–5,000,000,000, of an inch in diameter. These atoms were at the bottom of things. Out of them everything was supposed to be made.

What is there about a name or else about the human mind, that makes men want a name for a thing and when they get it, whether they understand that name or not, think that they have mastered the thing? A child asks, "What is That?" You tell him it is x. y. z. "Oh," he says, "that is x. y. z., is it?" and off he goes, thinking he understands all about it now, when, as a matter of fact, he does not know a bit more than he did before. We read that the first work God set Adam to do was to name things. He certainly would have been uncomfortable in a world of unnamed things, and when he got through, I suppose he thought he knew all there was to know.

So most men were satisfied when they were told that matter was made up of 'atoms.' But what was the atom? Newton had said it was a solid, massy, hard, impenetrable particle, so very hard as never to wear out or break in pieces. But there were other men, and among them such eminent experimenters as Boscovitch, Faraday and Sir Wm. Thompson (Lord Kelvin), who were convinced that it was not a solid thing, and that probably in the sense of 'solid stuff' there was no such thing as matter. It seemed impossible, however, that men should ever know if this were so or not, because the atom was such an infinitesimal thing. But the application of electricity to physical research has done as much for physics as the perfect balance did for chemistry and the prism for astronomy. It has *analyzed the atom.*

It was observed that by charging a small sphere, like a drop of mercury, with electricity, its weight was raised, and the more electricity that could be concentrated upon it, the heavier it became; from which it was evident that electricity has weight, the greatest characteristic of matter.

Next it was discovered that every atom can have associated with it a certain definite quantity of electricity. Some atoms only one such quantity, others twice as much, others again thrice as much, and so on, but no atom would receive a fraction of that quantity. Hence it was concluded that that quantity was the unit of electricity.

Then it was found that that unit of electricity could be separated from the atom and exist by itself, and that when so separated it had both weight and indestructibility—the two characteristics of matter. These minute charges of electricity have been called electrons. Their weight has been taken by a simple but ingenious little device of the late Sir Wm. Thompson (Lord Kelvin) and found to be 1-1,000 of the weight of an atom of hydrogen. It was natural to suspect after this discovery that the atom was made up of electrons and nothing else.

Now within the last three years this has been proved to be true. The atom has been found to consist of hundreds of negative and positive electrons interlocked in a state of violent motion so as to produce a stable configuration by their mutual attraction and repulsion, so that to-day the fundamental element out of which the whole Universe is made is not the atom of hydrogen but the electron, *which is not matter at all.* There is no such thing as matter in the commonly accepted sense, and there never was. This is enough to make a man gasp. Lord Byron came nearer being right than he knew when he said:—

What is mind? No matter.
What is matter? Never mind.

But one cannot leave the matter here. What is electricity? That is the burning question in physics to-day. Men are hot after it. Powerful methods of attack have been contrived, and men will never rest until they know. It is energy. That is all they know yet. But what is energy? I submit that the physicist will never find the answer in his own domain. That question has brought him to the borderland of psychology, and I suggest that he will find the answer there. It is an answer the truth of which may be tested by common experience. There is a form of energy which is familiar to us all. It is the human will. The will is potential energy and every act of volition is a translation of it into kinetic energy. How we can by an exercise of the will lay hold of our muscles and cause them to contract, we do not know, but we do it all the time. Through their contraction, the will may be turned into motion, and that into heat, and that in turn into electricity. If you begin with that electricity and run it back to its source it is found to be at last the will. We thus perceive from daily experience that will is the ultimate cause of all actions which we can trace from the beginning. Why then should we not conclude that some will is the ultimate source of everything?

Will is the essence and exponent of personality. Thus we are led across the realm of physics into psychology, but I believe the step which has taken us across is no jump, but is the next, natural, short step, and the step which we had to take if we would keep up the pursuit. If I am right, then I must conclude that the whole so-called Material Universe, from the outermost edge of the Milky Way on the one side to the outermost edge of that Galaxy on the other side, with all that lies within it of vast nebulæ, mighty burning suns, and huge planets with their satellites, its abysmal ether, its immense mechanical movements, its fearful chemical processes, and this earth with its innumerable and varied sights and sounds and its complex activities, ourselves and everything which may exist around us, unseen and undreamed of, is one gigantic, bewildering and awful manifestation of some person. In the face of a fact like this, one feels like walking softly in the world.

There are two features of this manifestation which help to identify Him. One is that He is conditioned. Everything in the Universe is conditioned by time, space, and causation. Creation is an act, not a thing, and whatever action there may have been in the infinite past, there was a time when this concrete act began to be undertaken, from which beginning it has evolved to its present state. This fact and the observed dissipation of heat in spite of the law of conservation, sets a bound of time before and behind. Astronomy tells us, moreover, that the universe is limited in space. If it were not, the speed of the stars would be different from what it is, and the whole sky would be as full of light as the day. Further, those mighty lenses with which our modern observers are equipped enable them to peep through the rifts of the Milky Way into emptiness all round. The Universe is as much a unit as the world itself, having the Milky Way for its Equator and the polar and antipolar stars for its poles, though so tremendous in size that it takes light 36,000 years to cross it, going at the rate of 600,000,000 miles an hour. Furthermore, we observe everywhere that regular sequence of events which we call cause and effect. The Universe is therefore the manifestation of a conditioned personality. The other feature is that He whose will is behind it all must nevertheless be unconditioned. He is outside the sequence of cause and effect, since He began it. He transcends space, for He compasses all, and He antedates time, for He must have been before He began to act, else He could never have acted at all. To say that He is unconditioned is to say that He is infinite. We must conclude, therefore, that these conditions are self-imposed

Theology tells us of One who fulfills this description. He is called the Word of God; for like the body to its spirit He is the manifestation and the utterance of the Godhead. "No one hath seen God (the Father) at any time, the only-begotten God Who is in the bosom of the Father, He hath declared Him." He is, we read, "the very image of the Father's substance" and is therefore God, "very God of very God." "Pre-existing in the form of God He considered it not a prize to be held fast, to be equal with God, but conditioned Himself, assuming the form of a servant." "All things were made by Him" and "in Him all things hold together," for "He upholds all things by the expression of His power."

We have come to the end of the pursuit. Everywhere is the awful presence of God. "In Him we live, and move, and have our being." Here is the answer to the age-long riddle of existence. We have made it harder than it was, by assuming that the created things of God were related to Him as things are to us,— quite apart and other than Himself. "God is all" and all is God. Nature is an Epiphany.

We ourselves are chips off the divine Being, so to speak. God has created us by setting us off from Himself, and limited Himself still further by generously endowing us with freedom, thus giving us the custody of ourselves, not that we might go counter to Him, but that we might have the exalted privilege of being "co-workers with Him."

"Our wills are ours, we know not how,
Our wills are ours to make them thine."

And given our wills in harmony with Him, who can say what we may not do? Given such power over our entire body as we now have over our voluntary muscles, so that we could control even their constituent electrons, our bodies would have every power which our Lord's risen body had. Such control as this is not beyond reason. Every function of the body is under the power of the mind. Even the chemistry of the bodily secretions is determined by the state of the mind, and, if the chemical affinities of the elements of the body are affected by the mind, the electrons may be and perhaps are so controlled also. But in our present state only a small portion either of the body or of the mind is under our personal control. Most of it is subconscious. But there is no hard and fast line between our conscious and subconscious activities. Voluntary and conscious activity is continually passing into the region of the subconscious, and subconscious activities are ever emerging into consciousness. It may very well be that in a higher and more spiritual state, when our wills are in perfect acccord with the great Will which is all about us, every activity of our body will be subject to our will, and we shall have that perfect freedom which is given to perfect obedience. Here may be the solution of our Lord's post-resurrection powers. His was a humanity which had done always those things which pleased His Father, even unto death, and had entered into "the glorious liberty of the children of God." And we know that those powers are possible from the nature of things, for recent discoveries in physics have shown them to be so.

Take the glory which He showed to St. Paul and St. John after His ascension and which had startled the Apostles out of sleep in the night of His transfiguration. It has been found that all things emit light as well as reflect it, though not in sufficient amount to be seen by us. In other words, they have the power to start waves of light in the ether. This is due to the orbital motion of the component electrons. The faster that motion the greater the light. Suppose that motion to be under the control of our Lord's will, and it is obvious that He could show forth such glory or withhold it as He pleased.

Take again His power to appear and disappear. We see almost everything by reflected light, that is by the light of waves which approach it, but there is much of this light which is invisible to us. If we should arrange all its rays in a row like a keyboard, there would be only about two octaves visible to our eyes. Therefore it is possible for an object to be present, located, and photographed, and yet be unseen to every human eye. Since everything has the power to emit light, it is possible that the light waves which it starts undulating away from itself might neutralize those which come to it, and so it become invisible by those rays. This is the explanatoin of Newton's rings, in which certain waves of light are stopped and so much of the light put out. Given in our Lord's case such control of the electrons as we have suggested, it becomes plain that He could render Himself visible or invisible while He remained present in all His corporal reality. Until we know what gravity is, we cannot understand His ascension. That He had the power to overcome this force was plain when He walked upon the sea; and so had St. Peter for a little while, when he walked on the sea to meet Him; and so shall we all have at last, when we are "caught up in the clouds to meet the Lord in the air."

Related to the power by which He ascended, was the power by which He moved from place to place. We are only just beginning to learn the mighty energy which lies beneath all things. In the atom with its hundreds, perhaps thousands, of electrons, is a power millions of times greater than gravity, so great that their own motion when set free, says Sir Oliver Lodge, "far exceeds that of any cannon-ball that ever existed, being as much faster than a cannon-ball as that is faster than a snail's crawl; a hundred times faster than the fastest flying star." With a body possessed of such energy as this, it must have been possible for our Lord to have gone from place to place with the speed of thought and by the mere exercise of His will.

Finally, with respect to His passing through the closed doors of the room where His disciples were assembled and through the rocky walls of His tomb, we know that an atom is exceedingly small, but that the electrons within it are found to be a hundred thousand times smaller. The spaces between these component electrons in the sphere of the atom are relatively so great that they can be compared only with the spaces between the planets. Therefore it is that a radiating element like Radium can pass through a plate of iron and be found deposited on the other side. In the light of a fact like this, there is nothing incredible in our Lord's body passing through those doors and walls. There was no more difficulty about it than there is in a shower of meteors passing through the solar system.

Such was the glory and power of our risen Lord, and such also shall be the power and glory of those who "shall be accounted worthy to obtain that world and the resurrection from the dead," for "we shall be like Him."

GILES HERBERT SHARPLEY.

St. Joseph, Missouri.